

WHAT IS CLAIMED IS

1. A wafer edge exposure apparatus for exposing an edge of a semiconductor wafer, comprising:  
an optical section for radiating exposure light toward  
5 an edge of a semiconductor wafer;  
a sensor for detecting the height of the edge; and  
a focus position control mechanism for controlling the focal position of exposure light originating from the optical section, on the basis of a value detected by the sensor.
- 10 2. The wafer edge exposure apparatus according to claim 1, wherein  
the sensor includes a focal sensor for sensing a distance between the optical section and the edge; and  
15 the focus position control mechanism controls a focusing position of exposure light such that the focus of exposure light originating from the optical section matches the height of an edge surface.
- 20 3. The wafer edge exposure apparatus according to claim 1, wherein the focus position control mechanism includes a position control mechanism for controlling a relative position between the optical section and the edge.
- 25 4. The wafer edge exposure apparatus according to claim 1, wherein the focus position control mechanism includes a zooming mechanism for controlling the focal distance of the exposure light originating from the optical section.
- 30 5. A wafer edge exposure method for exposing an edge of a semiconductor wafer, comprising:  
a detection step for detecting the height of an edge of a semiconductor wafer;

a control step for controlling the focusing position of exposure light radiated toward the edge, on the basis of a height of the edge; and

an exposure step of radiating exposure light towards the edge after the control step.

6. The wafer edge exposure method according to claim 5, wherein

the detection step includes a step of sensing a distance between an optical section for outputting exposure light and the edge; and

the control step includes a focus control step for controlling a focusing position of the exposure light originating from the optical section such that the focus of the exposure matches the height of an edge surface.

7. The wafer edge exposure method according to claim 6, wherein the step of controlling a focus includes a step of controlling a relative position between the optical section and the edge.

8. The wafer edge exposure method according to claim 6, wherein the focus position control step includes a step of controlling the focal distance of the exposure light by means of driving a zooming mechanism of the optical section.